

## EAST Search History

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L1	2844335	actuator or carriage or vcm or ((voice or drive or driving) adj2 coil) or ((oscillat\$4 or linear) adj2 motor) or magnetic adj "2" circuit or (coil\$1 near3 bobbin) or ((oscillat\$4 or magnetic) adj2 rotor) or ((electro adj magnet\$3 or electromagnet\$3) adj2 (drive or driving)) or (step\$4 near3 motor) or leadscrew or feedscrew or ((lead or feed\$3) near3 screw\$1)	EPO; JPO; DERWENT	OR	OFF	2006/06/20 09:52
L2	103464	tape and g11b\$.ipc.	EPO; JPO; DERWENT	OR	OFF	2006/06/20 08:13
L3	19650	1 and 2	EPO; JPO; DERWENT	OR	OFF	2006/06/20 08:14
L4	175211	((micro or fine or electro adj static or electrostatic or two adj stage or dual or high adj resolution) adj2 (position\$3 or actuation or actuator\$1 or motor)) or microactuat\$3 or microposition\$3 or piezo adj2 electric\$1 or piezoelectric or PZT or lead adj (zirconium or zirconate) adj titanate or microelectromechanical or MEMS or micro adj electro adj mechanical or bimorph or monomorph or electrostrict\$5 or electro adj strict\$5 or ferroelectric\$6 or ferro adj electric\$5 or pervoski\$5 or SMA or shape adj memory	EPO; JPO; DERWENT	OR	OFF	2006/06/20 08:17
L5	280	3 and 4	EPO; JPO; DERWENT	OR	OFF	2006/06/20 08:16
L6	175671	((coarse or macro or micro or fine or electro adj static or electrostatic or two adj stage or dual or high adj resolution) adj2 (position\$3 or actuation or actuator\$1 or motor)) or microactuat\$3 or microposition\$3 or piezo adj2 electric\$1 or piezoelectric or PZT or lead adj (zirconium or zirconate) adj titanate or microelectromechanical or MEMS or micro adj electro adj mechanical or bimorph or monomorph or electrostrict\$5 or electro adj strict\$5 or ferroelectric\$6 or ferro adj electric\$5 or pervoski\$5 or SMA or shape adj memory	EPO; JPO; DERWENT	OR	OFF	2006/06/20 09:53
L7	286	3 and 6	EPO; JPO; DERWENT	OR	OFF	2006/06/20 09:30

## EAST Search History

L8	11041	vcm or voice adj coil	EPO; JPO; DERWENT	OR	OFF	2006/06/20 09:54
L9	80	2 and 8	EPO; JPO; DERWENT	OR	OFF	2006/06/20 09:31
L10	59	9 not 7	EPO; JPO; DERWENT	OR	OFF	2006/06/20 09:31
L11	471950	actuator or carriage or vcm or ((voice or drive or driving) adj2 coil) or ((oscillat\$4 or linear) adj2 motor) or magnetic adj2 circuit or (coil\$1 near3 bobbin) or ((oscillat\$4 or magnetic) adj2 rotor) or ((electro adj magnet\$3 or electromagnet\$3) adj2 (drive or driving)) or (step\$4 near3 motor) or leadscrew or feedscrew or ((lead or feed\$3) near3 screw\$1)	US-PGPUB; USPAT	OR	OFF	2006/06/20 09:53
L12	179646	((coarse or macro or micro or fine or electro adj static or electrostatic or two adj stage or dual or high adj resolution) adj2 (position\$3 or actuation or actuator\$1 or motor)) or microactuat\$3 or microposition\$3 or piezo adj2 electric\$1 or piezoelectric or PZT or lead adj (zirconium or zirconate) adj titanate or microelectromechanical or MEMS or micro adj electro adj mechanical or bimorph or monomorph or electrostrict\$5 or electro adj strict\$5 or ferroelectric\$6 or ferro adj electric\$5 or pervoski\$5 or SMA or shape adj memory	US-PGPUB; USPAT	OR	OFF	2006/06/20 09:54
L13	70721	tape.ti,ab,clm.	US-PGPUB; USPAT	OR	OFF	2006/06/20 09:54
L14	789	11 and 12 and 13	US-PGPUB; USPAT	OR	OFF	2006/06/20 09:54
L15	20164	vcm or voice adj coil	US-PGPUB; USPAT	OR	OFF	2006/06/20 09:54
L16	156	14 and 15	US-PGPUB; USPAT	OR	OFF	2006/06/20 09:55
L17	14119	antirotat\$6 or anti near2 rotat\$5	US-PGPUB; USPAT	OR	OFF	2006/06/20 09:55
L18	23	14 and 17	US-PGPUB; USPAT	OR	OFF	2006/06/20 10:07
L19	144	16 not 18	US-PGPUB; USPAT	OR	OFF	2006/06/20 10:14
L20	1461172	plastic or resin or lightweight or low adj mass or light adj2 weight	US-PGPUB; USPAT	OR	OFF	2006/06/20 10:14

## EAST Search History

L21	12	18 and "23"	US-PGPUB; USPAT	OR	OFF	2006/06/20 10:14
L22	13	18 and 20	US-PGPUB; USPAT	OR	OFF	2006/06/20 10:16
L23	21796	linear near2 motor	US-PGPUB; USPAT	OR	OFF	2006/06/20 10:16
L24	20164	vcm or voice adj coil	US-PGPUB; USPAT	OR	OFF	2006/06/20 10:17
L25	3506	taper\$4 near2 core	US-PGPUB; USPAT	OR	ON	2006/06/20 10:17
L26	2	23 and 24 and 25	US-PGPUB; USPAT	OR	ON	2006/06/20 10:17